

Application No.: 10/625,898

Docket No.: 30014456-2 US (1509-427)

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. *(Currently amended)* A colour sensor having a plurality of LEDs, the LEDs being arranged to function as photosensitive devices ~~[[of]]~~ having differing and overlapping spectral responses and a switching means-arrangement arranged to read the-respond to an electrical output of each photosensitive device-LED separately in response to the LEDs having optical energy incident thereon, and wherein the photosensitive devices are LEDs.
2. *(Currently amended)* A colour sensor according to claim 1, wherein each of the LEDs has a light responsive face, the faces being photosensitive devices ~~are each oriented at~~ different angles relative to a sample to be sensed.
3. *(Currently amended)* A colour sensor according to claim 1, wherein a subset of the LEDs is arranged used to illuminate a sample to be sensed and at least one of the remaining LEDs is used-arranged to sense light reflected from the sample.
4. *(Currently amended)* A colour sensor according to claim 3, wherein each of the LEDs has a light responsive face, the faces being photosensitive devices ~~are each oriented at~~ different angles relative to ~~[[a]]~~ the sample to be sensed.

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5. *(Currently amended)* A colour sensor according to claim 4, including a angle-switching means-arrangement arranged to activate the LEDs into a light emitting state in a predetermined sequence and to switch the electrical outputs of the ~~non-activated~~-LEDs that are not activated into the light emitting state so the LEDs that are not activated into the light emitting state are arranged to be able to supply the electric signals to an output of the sensor[[,]] in a predetermined sequence, the LEDs having detecting faces at differing angles, whereby the differing angles of the detecting faces of the LEDs are used being arranged to produce a plurality of combinations of light that is directed to be incident on and sensed as light reflected from a sample to be sensed.
6. *(Currently amended)* A colour sensor having a plurality of LEDs each ~~oriented~~-arranged to illuminate a sample to be sensed, from at least two different angles, the sensor further including LEDs arranged to sense light reflected from the sample and supply electric signals determined by the light incident on the LEDs to an output of the sensor.
7. *(Currently amended)* A colour sensor according to claim 6, including a switching means arrangement arranged to activate the LEDs into a light emitting state in a predetermined sequence and to switch the electrical outputs of the ~~non-activated~~-LEDs that are not activated into the light emitting state so the LEDs that are not activated into the light emitting state are arranged to be able to supply the electric signals to an output of the sensor[[,]] in a predetermined sequence, the LEDs having detecting faces and differing angles whereby [[the]] differing angles of the detecting faces of the LEDs are used

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arranged to produce a plurality of combinations of light that is directed to be incident on and sensed as light reflected from a sample to be sensed.

8. *(Currently amended)* A colour sensor comprising a plurality of LEDs ~~constructed~~ arranged to provide differing spectral light emissions and each oriented to receive reflected light from a predetermined sensing ~~location.~~ location, the LEDs being arranged to supply an electric signal to an output of the sensor in response to the reflected light from the sensing location being incident on the LED.
9. *(Currently amended)* A sensor according to claim 8, wherein each LED has a face ~~[[is]]~~ oriented to direct emitted light at ~~[[a]]~~ the predetermined sensing location and the sensor further includes a switching means arrangement ~~arrangement~~ arranged to switch the LEDs to activate predetermined sets of the LEDs to emit light and to direct the electrical outputs of the non-activated LEDs to the sensor output.
10. *(Currently amended)* A method of sensing colour comprising illuminating a sample to be sensed and ~~arranging for causing~~ at least one LED to (a) receive reflected light resulting from the sample being illuminated during the illuminating steps and (b) derive an ~~whereby the electrical output~~ ~~[[of]]~~ in response to the LED receiving the reflected light is ~~used to provide an indication of the reflected light energy in the emission band of the LED.~~

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11. *(Currently amended)* A method according to claim 10 including illuminating the sample by using at least one of the LEDs, LED, switching the LEDs to a light emitting state in a predetermined sequence and switching the electrical outputs of the non-activated LEDs that are not switched to the light of emitting state to an output of the sensor~~[[,]]~~ in a predetermined sequence, the LEDs having emitting faces at differing angles, and causing the ~~whereby the differing angles of the faces of the LEDs are used to~~ produce a plurality of combinations of light (a) incident on and (b) sensed as light reflected from a sample to be sensed.
12. *(New)* A method according to claim 10 wherein the LED has an emission band and further including deriving an indication of the light energy reflected from the sample in the LED emission band by responding to the electrical output derived by the LED.